

CASES

OF

TWO EXTRAORDINARY POLYPI
REMOVED FROM THE NOSE,
THE ONE BY EXCISION WITH A NEW INSTRUMENT,
THE OTHER BY IMPROVED FORCEPS;

WITH

AN APPENDIX,

DESCRIBING AN IMPROVED INSTRUMENT
FOR THE FISTULA IN ANO,
WITH OBSERVATIONS ON THAT DISEASE.

ILLUSTRATED WITH A COPPER-PLATE.

BY

THOMAS WHATELY,

MEMBER OF THE ROYAL COLLEGE OF SURGEONS IN
LONDON.

“ I would by no means be supposed to think that there is not large room left for the
“ industry both of us and our successors; some of the operative parts of the art are still
“ capable of improvement, and the treatment of some diseases might certainly be altered
“ for the better.”

POTT.

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1805.

TO

ROBERT WARING DARWIN, M.D. F.R.S.

DEAR SIR,

I should deem the following sheets unworthy your acceptance, did they not afford me the gratifying opportunity of recurring to that portion of my life, which was honored with the friendly and social intercourse of yourself, and your late highly esteemed Father.

Although natives of the same city, our connexions have led us into establishments apart from each other, yet will no connexion, nor will any distance lessen the esteem I entertain for your various learning and professional abilities, nor obliterate the pleasing recollection of those interesting hours we have so often passed together.

I remain,

DEAR SIR,

your affectionate

and sincere friend,

THOMAS WHATELY.

Grafton Street,
Jan. 25, 1805.

EXPLANATION OF THE PLATE.

Fig. 1. See page 6.

REPRESENTS improved forceps for the extraction of large polypi of the nose through the mouth.

Fig. 2. See page 11.

Represents a pair of scissors for cutting out a polypus from the nose.

Fig. 3—3. See page 13.

Represent two views of a sheathed knife for the excision of a polypus from the nose.

Fig. 4. See page 14.

Represents the polypus cut from the nose by the sheathed knife.

a the teat or extremity hanging loose behind the uvula.

b b the broadest diameter of it's cut surface.

c c the narrowest diameter of the same part.

Fig. 5. See page 23.

Represents the polypus taken from the nose by the improved forceps described at Fig. 1.

a the teat or extremity hanging loose behind the uvula.

—All that portion of it extending to the dark line in the middle, was compressed by the forceps.

b the lacerated neck by which this polypus was attached to the nose.

c c c the three other lobes of the polypus.

Fig. 6—6. See page 38.

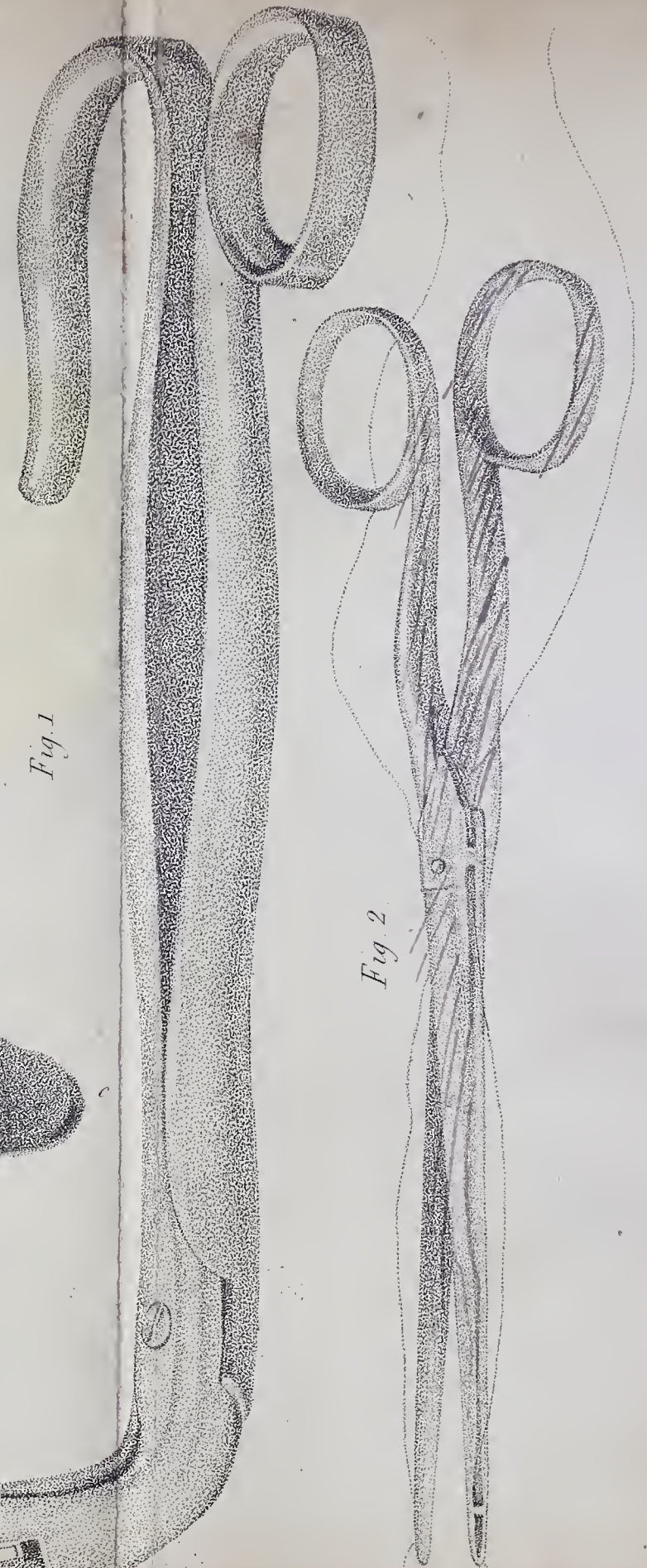
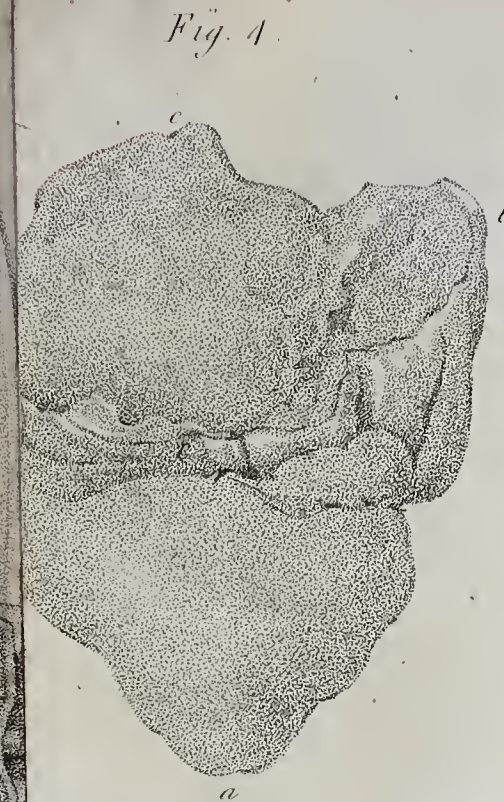
Represent the sheathed knives for cutting a fistula in ano.

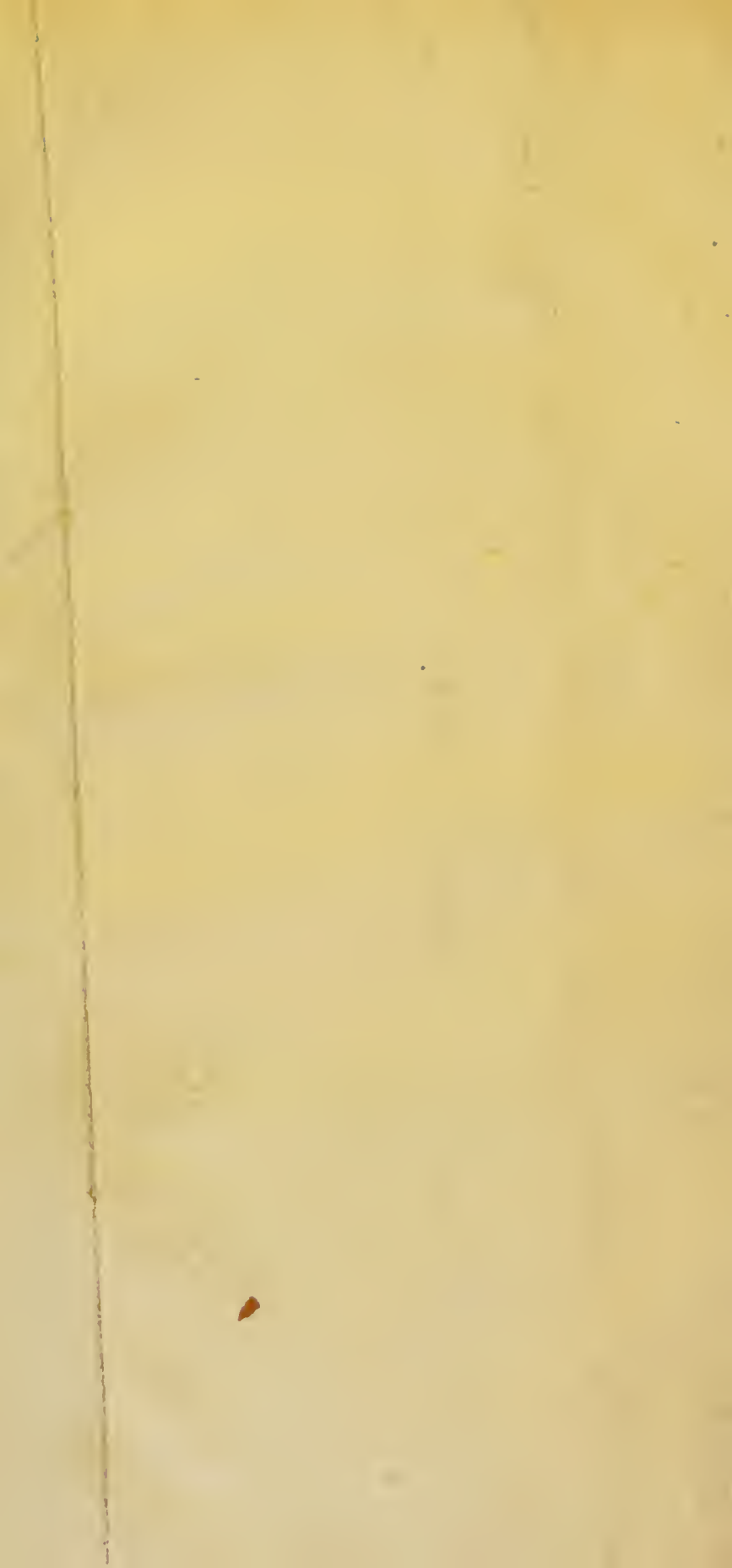
a the knife with the narrowest blade, sheathed.

b the same made a little larger, but unsheathed.

Fig. 7.

Represents a small polypus which the author extracted by forceps from the ear of a young woman about two years ago. From it's obstructing sounds it occasioned considerable deafness.





CASES

OF TWO EXTRAORDINARY POLYPI REMOVED FROM THE NOSE, THE ONE BY EXCISION WITH A NEW INSTRUMENT, THE OTHER BY IMPROVED FORCEPS.

EVERY new fact illustrative of disease, every successful effort at the alleviation of human misery, is so much added to the stock of medical science; and that experience, which may enable us to diminish the horror of suffering, is worthy of communication, inasmuch as it promotes the great end of medical inquiry. Influenced by such motives, I give to the public the following cases.

CASE I.

Mr. DAY, jun., No. 99, Newgate Street, aged 19, who allows me thus to use his name, about three years before he applied to me first perceived a difficulty of breathing

through the right nostril, which gradually increased for twelve months; at the expiration of which time, upon every increased secretion, the tears passed into his throat, instead of coming out at the nostril as usual. At this period, about half a pint of blood issued into the patient's mouth from the fauces, without any apparent cause, for six successive nights. Twelve months afterward, a still greater quantity of blood issued from the same part, for six successive nights. On the first three nights, the bleeding began about three in the morning, and was stopped with great difficulty each time. At the end of another year, the hemorrhage returned. On this occasion it began in the evening, and returned more copiously about three in the morning. These discharges ceased at the end of six days, during which, the patient is supposed to have lost about three quarters of a pint of blood every twenty-four hours.

About two years and a half from the commencement of his complaint, his breathing became so difficult, and so loud, as to debar him from going into company. His respiration was so audible, as to announce his approach before he entered a room. For

about three months before I saw him, he was unable to breathe through his nostrils, in consequence of which, he slept with his mouth open, and was awaked every half hour during the night, by the extreme dryness of his tongue, which he was under the necessity of moistening with liquid before he could again compose himself to sleep. In about a month from this period, he was seized with a peculiar drowsiness, which continued from the time he got up in the morning, till bed time, and which was so great, that he was apt to fall asleep, even while dressing himself. This rendered him almost incapable of attending to his business, and once in particular it overpowered him so much, that he fell down in the shop while serving a customer. He would even fall asleep on horseback, and passengers have several times stopped his horse in the street to awaken him. After dinner likewise he daily fell into an involuntary sleep for about an hour, being unable to prevent it.

In this state of the disease he applied to me. On examining his nose, I could distinctly see a small fleshy substance within the right nostril, which, though it evidently obstructed the free passage of air through

it, did not appear to be large enough to account for all the symptoms before related. On looking into his throat, the palatum molle and uvula were pressed considerably forwards, as if occasioned by a large tumour formed behind them. Lifting up the uvula with the end of a spoon, a large fleshy substance was seen, resembling the teat of a heifer. Around this a finger could be passed, but the place of its attachment within the nose was so high, that it could not be felt. I informed my patient that he could not be relieved by any other method, than that of extracting the tumour through the mouth; as I judged however that some difficulty might attend the operation, I proposed a consultation before I attempted it. Mr. Cline was called in, who advised the removal of the tumour through the mouth by the forceps, assisted with a ligature. On a further examination of the polypus on the day I had named for the operation, I thought it worth while to make a single trial with the forceps only; thinking that it might possibly be extracted by that instrument, without the assistance of a ligature. I passed the common polypus forceps through the mouth, and as high as possible

into the fauces, behind and above the uvula, and completely fixed them on the neck of the tumour; without enclosing in the instrument any part either of the uvula, or palatum molle. On attempting to extract the polypus, I used a gradual but considerable force for two or three minutes, but on increasing the force, the instrument slipped from it's hold. The patient experienced some pain, and a few drops of blood issued from the parts.

Finding by this trial, that the polypus was very strongly attached at it's base, and that it was probably broader at this part, than was at first suspected, I felt a doubt, whether the application of a ligature, as an assistant to the forceps, might not be attended with the danger of dividing the polypus, instead of separating it from the part to which it adhered, and thereby leave a portion of it behind. The use therefore of the forceps was repeated; and after several attempts, with an interval of a few minutes between each, and in which the united force of both hands was applied to the instrument, I was still unsuccessful: the forceps slipping off the tumour at each applica-

tion*. Near a month after these trials, I made other attempts with forceps, still stronger than those employed on the former occasion; yet with all the force I was able to apply to them, they slipped off as before, although the tumor was so firmly grasped, as to enable me to retain my hold for about two minutes each time.

The polypus now appearing to have so strong an attachment, as to afford no hope of removing it, without an unusual degree of force; it became necessary to employ forceps much stronger and larger than those in common use. I therefore ordered a pair to be made, of the size, strength, and curvature that appeared best adapted to the nature of the case. (Fig. 1.)

In about ten days after the last operation, I again visited the patient, accompanied by Mr. Ramsden, who, from the peculiarity of the circumstance, had expressed a wish to be present. But before I made use of the large forceps just mentioned, I resolved to try the effects of milder efforts. I therefore took with me two pair of small

* The patient in describing the sensation he felt when the forceps lost it's hold of the tumour, said that it felt as if it was made of India rubber.

stone forceps, one of them scooped at the end, to be in readiness, should it appear in the course of the operation that they might be of service: and as it occurred to me, that the polypus might possibly be detached at it's root, by sawing it with a piece of catgut, silk, or flexible silver wire, I was prepared likewise with an apparatus of this kind. With the last of these I renewed my attempts, by passing a ligature through the nostril, so as to embrace the neck of the polypus: to effect this, I passed a common bougie through the right nostril into the throat; and then with a pair of forceps drew the extremity of it just out of the mouth, to which I tied both ends of a piece of catgut, nearly half a yard in length. Mr. Ramsden afterwards gently drew the bougie back through the nostril, while I guided the catgut (thus formed into a loop) with the forefinger of each hand to the back part of the fauces, and with some difficulty passed it over the polypus. Continuing the same method, I carried the loop of the catgut high enough to embrace the root of the polypus. I then attempted to saw through it, by moving the ends of the catgut alternately upwards and downwards

through the nostril, but could not effect my purpose. Afterwards I took hold of both ends of the catgut string with my right hand, and gave it a sudden jerk, hoping thereby to detach the tumour; but this also failed*. Finding that it was impossible to detach the polypus by the catgut string, I then had recourse to the large forceps I had ordered purposely for this difficult undertaking, and endeavoured by them to extract the tumour through the mouth, as in the former trials. But with all the force I could exert with both hands, aided also by Mr. Ramsden's, the polypus resisted these efforts, violent as they were, and at length the instrument slipped from it as before. The forceps were fixed a second, and a third time, and the same force exerted, with no better success. Failing in this attempt, my next trial was

* Perhaps a saw or knife might be contrived for the purpose, made into joints, and covered with a sheath of leather, or such like substance. Such an instrument might be made extremely slender, and fixed exactly in the centre of the loop of catgut attached to the bougie, when drawn out of the mouth; it should afterwards be put round the root of the polypus, in the manner before described. My idea is, that it might then be unsheathed, and the act of sawing performed, by means of the two ends of the catgut hanging out of the nostril.

with the scooped stone forceps, the idea of which had occurred to Mr. Ramsden, as well as myself. They were immediately applied; but disappointment again attended our efforts. I then made a trial with a small pair of the common stone forceps, strongly beset with teeth, but without effect. These different trials took up much time, and during their operation gave considerable pain to the patient; yet, notwithstanding the force exerted, he lost but a small quantity of blood, nor was the surface of the tumour much injured by the repeated pressure of the different instruments applied to it, so tough and stubborn was its texture. The patient suffered no material inconvenience from these efforts; his sleep, even on the nights immediately succeeding, was not much more disturbed than usual; and on the following days he went abroad nearly as before.

After these unsuccessful attempts, Mr. Ramsden proposed a trial of the ligature. At the distance of about a week from the last operation, we met for the purpose of applying it. A piece of catgut was passed over the polypus, by means of a bougie, as described in page 7. The ends, being drawn

through the nostril, were afterwards inserted into the eye of Sharp's tonsil instrument. The latter was then introduced into the nostril, towards the neck of the polypus, and gradually, and gently turned round by Mr. Ramsden, so as to twist the catgut, and leave a noose on the tumour. The ligature being thus completed soon began to act upon the polypus, putting the patient to great pain. It was however left there, that it's action might be continued; but from the catgut breaking, it came away in a short time after. During this operation the patient suffered much more pain, and he passed a more disturbed night afterwards, than he had done from any of the preceding attempts made by the forceps.

At the distance of another week, we met again, in order to reapply the ligature, or to use further means for removing the polypus. I had given the case mature consideration, and I now thought it more advisable to make an attempt at the excision of the polypus by an instrument invented for the purpose, than to reapply the ligature*. I thought of two methods of effect-

* "The method by ligature," says Mr. Pott, "whether of silk or wire, is not attended with the inconvenience

ing the excision, one by a pair of long and blunt pointed scissars, introduced through the nostril; the other by a sheathed knife passed through the same aperture. Both these instruments I had made by Mr. Evans, and took them with me at our next meeting. I had little hope however, of being able to cut off the polypus, by any instrument introduced through the nostril, unless a method could be found out of directing it's edge to the part, at which I meant to make the division, namely, the point of it's attachment. It occurred to me, that this might be effected by a string of catgut, silk, or wire put round the neck of the polypus, by a bougie as before directed, and afterwards brought out at the nostril. Upon making trial of the scissars (Fig. 2.), the ends of the ligature were passed through a hole made in a groove near each point of the instrument, which, thus di-

“ of the caustic. It is certainly practicable in some instances; but as far as I have seen of it, is by no means equal to that by the forceps, either for it's general utility, or it's capacity of perfectly eradicating the excrescence. I know some ingenious practitioners, who approve of it; but I cannot say, from what has come within my knowledge, that it appears to me in so commendable a light.” Pott's Works, 4to, p. 732.

rected, were introduced to the part to which the polypus adhered, without much pain to the patient; but from the narrowness of the aperture of the ala, which in this subject was very small, and from the obstruction caused by the little excrescence within it, I found the space too much confined, to open the instrument wide enough for the excision of the polypus, without giving excessive pain. Had not however these impediments attended the case, I am of opinion that the intention might have been carried into effect. Owing to these circumstances, I was obliged to withdraw the scissars, without making any attempt to cut off the polypus with them. I then had recourse to the knife. It was a narrow straight bistoury, with a probe point, having a sheath fixed upon it's edge, by a screw put into a hole in the handle; an eye was made at it's point, to receive one end of a thread, intended to be passed round the polypus, in the manner already described, for the purpose of directing the knife to the neck of the tumour. There was also a contrivance by which the knife could be unsheathed at it's extremity, the length of three quarters of an inch. This was done by means of the

screw, which might be fixed in another hole, by drawing back the sheath. By exposing such a length of edge only, the interior parts of the nose were defended from the danger of being wounded. A knife of this description (Fig. 3.) was passed readily through the nostril to the neck of the polypus, by elevating the point at its first entrance, and directing it afterwards in a straight line; the conducting thread before mentioned being first passed round the polypus, and one end of it carried through the eye at the knife's point; it was then un-sheathed; an assistant held one end of the thread, while I took hold of the other with my left hand, and began to cut the polypus. The operation was continued till the patient grew somewhat faint, through the loss of blood. At this time, Mr. Ramsden putting his finger into the patient's fauces, in order to ascertain the state of the polypus, felt the end of the knife; upon doing the same myself, I found that I had cut more than half way through the polypus. I immediately proceeded, keeping the knife in the same direction, in which it was first introduced through the nostril, and completed the excision. In the latter stage of the operation, I was

much assisted by the forefinger of my left hand passed into the fauces, as it enabled me to guide the knife with certainty to the part, that yet remained to be cut. The knife having performed it's office, the polypus dropped into the patient's mouth; from which, to the great joy of every one present*, I brought it out with my fingers†. (Fig. 4.). The patient remaining faint, (though he had not entirely swooned throughout the operation) was laid upon his back, and a styptic was applied to the wound by means of a syringe. The hemorrhage lessened considerably, within a very short time after the operation was over; a small quantity of blood however continued to ooze through the mouth. To stop this, I passed a bougie through the nostril into the throat, and bringing the end of it into the mouth, I tied to it a string, to which was attached a piece of lint. On drawing the bougie back again, the lint was conveyed to the wounded part; and by making a pressure

* Among these was Mr. Hart, of Bethnal Green, who attended at all the preceding operations.

† On taking the dimensions of the *cut surface* of this polypus, a few hours after the operation had been performed, it's broadest diameter was found to be *two inches*, and it's narrowest, *an inch and three eighths*.

on the bleeding vessels, all further discharge ceased. My patient continued low for about three hours ; after which he fell asleep, and passed a better night than he had done for many months before. The following day he was perfectly well, and in two or three days more was able to ride on horseback. He is at this time (more than three years after the operation) in perfect health ; nor does there appear any indication of a polypus forming again.

To this account I beg leave to add the following remarks :—Had it been in my power to have extracted this tumour by the forceps, I certainly should not have attempted it by the knife ; but a sight of the polypus after it's excision makes it more than probable, that a force sufficient for it's extirpation by the forceps could not have been exerted, without dragging away some of the interior parts of the nose connected with it. Mr. Ramsden also was so decidedly of the same opinion, that, under an apprehension of dangerous consequences, he called me aside in the interval of one of our attempts with the forceps, and hinted, that he thought it would not be prudent to use any greater force, than had been already exerted. In

this suggestion he had been supported by the opinion of several gentlemen, to whom he had related the case.

On the use of the ligature in this case I would remark, that it must have been many days in making it's way through a substance of so tough a texture, and of so great thickness, as the polypus here described. It must have been repeatedly tightened, and if it had effected a division, the patient, in all probability, must have suffered extreme pain, during the whole of this tedious process. Excision therefore seemed to me a safer and less painful way of relieving the patient from this distressing complaint. There appeared indeed something to apprehend from hemorrhage, in removing this tumour by the knife.—I must confess however, that I was not at all afraid of this circumstance; and was the more emboldened from what those experienced and able surgeons, Mr. Samuel Sharpe, and Mr. Pott, have said on the removal of polypi by the forceps. “The motive,” says the first of these two writers, “for preferring the ligature to the forceps, is the probability of a hemorrhage after extraction, which is described by all writers, and particularly

“ by M. Levret, as exceedingly danger-
 “ ous, especially in those polypi which
 “ hang down in the throat. This is a very
 “ important consideration, supposing it to
 “ be true; but I cannot help remarking on
 “ this occasion, that what is esteemed a
 “ common accident, has never happened
 “ to be once the consequence, where I
 “ have performed the operation myself, or
 “ where I have seen others perform it;
 “ however, I do not deny the possibility,
 “ though I question the frequency of it.”
 Sharp’s Critical Enquiry, page 241. Mr.
 Pott remarks, “ That the hemorrhage so
 “ much talked of, so solicitously guarded
 “ against by writers, and so much dreaded
 “ by young practitioners, will not often, if
 “ *ever*, be met with, in such cases as fairly
 “ and properly admit the operation.” Pott’s
 Works, 4to, page 730. The remarks of each
 of these gentlemen are indeed made, as be-
 fore observed, in reference to the extraction
 of polypi, by the forceps, but are nearly as
 applicable to the excision; for as the vessels
 are fairly divided by this method, and as
 pressure can be applied to them, by means
 of lint, should it be required, there is little
 reason to fear any danger from a hemor-

rhage; though I can readily admit, that there may be still less of this danger from a rupture of the vessels by laceration.

Should another case of this kind occur in my practice, and the forceps were to fail, I should certainly prefer the method by excision, to that of the ligature. Such an operation might probably be performed, with even more ease, than was the case in the present instance; inasmuch as a finger might generally be introduced within the fauces, behind the uvula, at the commencement of the operation; by so doing, the knife could be guided with more certainty to the neck of the tumor. It may likewise be remarked, that to guard against hemorrhage, it would be advisable before the operation commences, to run a thread through the nostril, by means of a bougie, in addition to that passed through the eye of the knife; the former might be drawn out of the mouth, and continue in this situation, with a piece of lint attached to it, to be in readiness to be drawn back through the nose, for the purpose of applying the lint to the bleeding surface, instantaneously after the operation.

CASE II.

JAMES EVANS, aged 18, apprentice to Mr. Clarke, Hair Dresser, No. 40, Clerkenwell-Green, applied to me in the year 1803, on account of a difficulty of breathing through his nostrils. It was about five years before this period, that he first felt an obstruction, which then only existed in the right nostril. This sensibly increased for three years, until he was no longer able to pass air through it. The other nostril then began to be affected in the same way, and in the course of six months was equally impervious to the passage of the air. He now frequently felt an acute momentary pain to extend through his head, whenever he had occasion to use his pocket handkerchief. In an early stage of his complaint, his voice became altered, and his respiration more difficult; and for many months before I saw him, these symptoms increased so much, as to excite the notice of those who sat near him:—His breathing in particular, was attended with a peculiar noise. About a year previous to his application to me, he was occasionally seized with a drowsiness,

which, in six months became so oppressive, as generally to occasion sleep, if he sat still for a few minutes only after dinner; and this lethargic propensity very frequently induced unpleasant consequences. At one time it overcame him, whilst dressing a gentleman's hair, and he dropped the hot curling irons upon the head of the person he was dressing. He has been known likewise, to fall asleep while setting a razor, and has frequently let the razor drop on the floor, especially, when he has attempted to continue this employment longer than the setting a second razor at one time. Other dangers to which he was exposed through this sleepiness, might be here mentioned. When gone to his chamber, for instance, he has several times fallen asleep on the edge of the bed, before he undressed himself, and left his candle burning, to the great hazard of himself, and every person in the family.

On an examination of his right nostril, a small funguslike substance was perceived, adhering to the septum narium; but not large enough to obstruct his breathing, or to occasion any inconvenience whatever. In the throat no unusual appearance could be seen; but on passing the fore-finger be-

hind the palatum molle and uvula, a considerable polypus was distinctly felt. The finger could be passed entirely round it, but the root was too high in the nose to be within it's reach. A part of it could however be distinctly seen by the naked eye on lifting up the uvula and palatum molle, but the skin had not that leather like appearance, mentioned in the preceding case; nor had it the transparent look, or soft texture usually met with in polypi situate in the anterior part of the nose: yet, from it's size, I expected to meet with considerable difficulty in extracting it.—My experience in the former case, determined me first to attempt at the extraction with a pair of strong forceps; and as I found those represented at Fig. 1 admirably adapted for the purpose, I resolved to apply them. Before, however, I made trial of this instrument, I fixed the common polypus forceps upon the tumor, merely by way of experiment, and to determine whether this instrument, in case it should be used, was likely to succeed; but from the large size of the polypus, and the smallness of the forceps, it appeared almost certain, that if the extraction were attempted, it would not bring away

the whole of the tumor. I therefore, withdrew the instrument, and proceeded to pass the forceps already described into the upper part of the fauces adjoining the tumor. Having done this without difficulty, I opened them with care, and embraced the polypus, taking the precaution before I began the extraction, to observe that no part of the uvula, or palatum molle, was included in the instrument; I also judged it advisable, to pass my fore finger between these parts and the instrument, to be assured with greater precision than ocular proof afforded, that they were perfectly disengaged. Satisfied of this, and having a firm hold of the polypus, I began it's extraction by pulling firmly downwards, endeavouring by a curved motion of the hand, to incline the point of the instrument towards one of the tonsils. It however, resisted a moderate force, and the strength of both hands was at length required to dislodge it. In about a minute from the commencement of the operation, it gave way, and dropped into the patient's mouth. The sound which was heard at the moment of it's separation, the large size of the polypus, filling as it were the patient's mouth, and the sudden change of his voice,

which became like that of a person who has lost his palate, induced a momentary apprehension, either that a part of the palatum molle had come away with the tumor, or that at least it was wounded in the operation. Mr. Austin, jun., surgeon, in Red Lion Street, Clerkenwell, who held the patient's head during the operation, in a very steady manner, had likewise the same fear. In order, however, to be satisfied on this point, I examined his throat, and had the pleasure to find the palate and uvula in a perfectly natural state.

The tumor proved on examination to be wholly composed of a polypous substance, formed of four distinct lobes. (Fig. 5.) The largest viz. the one felt by the finger, was that to which the forceps had been fixed. The pressure of the instrument had flattened it's lower part, and had given it a redder, or more vascular appearance, than the other parts of the tumor. About the centre of the upper surface of the polypus, there was a small lacerated neck, or projection, with a ragged extremity, which, on examination, proved to be that portion by which it was attached to the nose; and as every other

part of the tumor was entire, it did not appear that it had any other attachment.

The case now described would have been as favourable for the use of the ligature, from the small diameter of the neck of the polypus, as the former case was unfavourable, had not the substance of it been so large, and divided into so many lobes, that it would have been extremely difficult, perhaps impossible, to have fixed the ligature upon it's neck. It may be presumed the ligature could have included only the largest lobe, the one to which the forceps was attached, which might have been removed; but all the upper lobes of the polypus, those by which the breathing was principally obstructed, would have remained behind; and their removal, perhaps, have been rendered impracticable by any means whatever; but even if the polypus had been composed of only one lobe, and that it had been possible to have known that before the operation, I should have preferred the use of the forceps, to that of the ligature, from the difficulty there would have been of passing the ligature over a tumor of that size, so as to fix it on it's neck. The slight hemorrhage, which occurred in this case, is ano-

ther proof of the little danger to be apprehended from this circumstance, in cases which are proper for the use of the forceps.

I shall leave it to more able pathologists, to explain the curious and remarkable disposition to sleep, which attended both the cases I have related.

APPENDIX.

DESCRIPTION OF AN IMPROVED INSTRUMENT FOR THE FISTULA IN ANO, WITH OBSERVATIONS ON THAT DISEASE.

THE Fistula in Ano is a very common complaint; and almost all, who are afflicted with it, are alarmed at it's nature, and feel uncommon dread at the idea of being cut for it. This arises in part from it's situation; which is such, as not to admit of inspection or examination, by the patient himself. Ignorance therefore of the nature of the complaint, added to the reports that are generally circulated concerning the severity of the operation, tend to fill the patient's mind with the worst apprehensions. The subject has been handled by so many able writers, among whom Mr. Pott unquestionably stands the first; that it is not my intention to enter minutely into it. I propose merely to state a few particulars, for the purpose of recommending to the pro-

fession an improved instrument, the design of which is to render the operation less painful to the patient, and more certain of making a complete cure of the disease.

The fistula in ano usually proceeds from an abscess in the adipose membrane, adjoining to the intestinum rectum. This abscess commonly bursts on the external skin, at a greater or less distance from the verge of the anus, by one opening only, except that in larger collections of matter, or in old neglected cases, there are often more of these external openings than one. Sometimes there is an internal, as well as an external opening; the matter from the abscess penetrating through the coats of the intestinum rectum into its cavity. In other cases, there is no complete opening into the cavity of the rectum, though the coats of the intestine are evidently denuded, and partly eroded by the matter. It occasionally happens, (though the instances are not very numerous) that the abscess bursts only within the cavity of the intestine; in this case there is generally an external induration of the integuments, sometimes attended with an inflammatory aspect, which serves to point out the situation of the fistula. Whenever an

abscess in this part takes place, and points outwardly, it may usually be left to burst of it's own accord; this natural process may however be assisted, and the pain attending it alleviated, by emollient poultices constantly applied to the part. It is not often good practice in this stage of the disease, either to harass the patient even by mere puncturing the abscess, or to proceed to the division of the intestine; as in this stage of the disease there is no saying but that the abscess, if suffered to break of itself, may, after the matter is discharged, heal up very readily; and during this highly inflamed state of the parts, all operations are accompanied by a greater degree of pain. But if emollient poultices be applied, quiet enjoined, and the abscess suffered to burst of it's own accord, the inflammation and extreme tenderness will subside in a few days, and the operation for the radical cure, if necessary, may be afterwards performed with ten times less pain than it could have been done, while the parts were in a highly inflamed state.

We are, however, more frequently applied to for the cure of this disease some time after the abscess has burst. In these cases, we

are generally under the necessity of employing the knife. It has been before observed, that there is one or more fistulous openings, at a greater or less distance from the verge of the anus; these can very seldom be healed, unless the cavity of the fistula, and that of the intestine, be laid into one. If this be done in a proper manner, it almost always succeeds in making a perfect cure of the complaint*. But if the operation be neglected,

* Abscesses sometimes form and burst within a short distance of the rectum, which are entirely owing to strictures in the urethra; these now and then take place when the stricture is not very much contracted, and of course when the passage for the urine is not greatly obstructed. A probe may be passed in some of these cases so near to the rectum, as to be felt by a finger in ano; but the coats of it are seldom denuded by the disease. The stricture in the urethra may be discovered by passing a bougie; and as a further proof of this disease, a few drops of urine generally pass through the fistulous orifice each time the patient makes water. It would be great absurdity, to attempt the cure of such cases by slitting the rectum. It should be done by dilating the stricture of the urethra to it's full extent, either by wearing a bougie, or by the use of caustic, which, without the use of any other remedy, will frequently perform a cure.

There are likewise diseases of a very serious kind frequently found in these parts, which sometimes resemble the curable fistula; such as those which pro-

the disease will often continue in this state for years. A remarkable case of this kind occurred in my practice about five years

ceeded from lumbar, or other deeply seated abscesses, cancers, and strictures of the rectum, many of which I have seen. It is not the purpose of this paper however, to treat of all the complaints, to which this part of the body is liable. Since the above was written, I may add, that I have at this time under cure, with the kali purum, four deplorable cases of strictures in the rectum, which may be deemed of a cancerous nature. In two of them there are fistulous communications with the vagina; they are all attended with warty excrescences over the whole internal surface of the rectum, as far as can be felt with a finger; a large ichorous and bloody discharge, great derangement of the general health, and had resisted every method before used. The kali has been applied once a week, for several weeks past, upon the end of a bougie just large enough to pass the stricture, and the size of it has been gradually increased, as the strictures dilated. In order to diffuse the kali, it was inserted in three or four holes, made at the extremity of the bougie, and the quantity of about the twelfth part of a grain put into each. The bougie was then moved along the whole diseased surface, for about two or three minutes, till the kali was dissolved. I have the pleasure to say, that each of these patients found immediate relief from the use of this remedy. The warty excrescences have been much reduced, the ichorous and bloody discharge much abated, and in some of the cases nearly removed; the strictures are likewise more open, and the general health much improved. Whether I shall be able even-

ago. The disease was of very long standing, and had from it's continuance so contracted the lower part of the rectum, that a plum stone had lodged in it, where it is probable it had remained many years. As this case is rather curious, I shall transcribe it from the Medical Journal, in which it was first published. Mr. ——— in Great Carter Lane, Doctors' Commons, aged 45, applied to me in September, 1799, for the cure of a fistula in ano, of more than ten years standing. He had consulted a surgeon on his case, at a very early period of the disease, but was told, that he had not that complaint. The fistula continued nearly seven years in the same state as at it's first appearance. About the expiration of this time, he was seized with a violent diarrhœa, attended with considerable pain in the bowels, particularly in the rectum, and about the anus, where he very frequently felt a pricking and shooting. He was not

tually to make a perfect cure of them, I will not at present pretend to say. I have lately made a perfect cure of another case of stricture of the rectum, by six applications of the kali; but it was a simple contraction, and unaccompanied with warty excrescences, yet much distress arising from pain in the adjoining parts was produced by it.

able, after an evacuation, to close the sphincter ani, without great pain, which generally continued for three or four minutes. The symptoms continued with such violence only two or three days; but from this time till he applied to me, (a period of more than three years) he had been afflicted with a diarrhœa, and had generally about four or five stools every day, and for the most part one every night. At each motion he was obliged to obey the call, the moment it came upon him. During this period he felt occasionally some pain in the abdomen, and a pricking about the rectum. At intervals his stools would be somewhat solid; and at these times he remembers to have frequently observed a division, or mark, on one side of the fæces, as if something had cut them in their passage, which he compared to a bullet shot from a rifle barrelled gun. About three or four days previous to his application to me, he was again seized with a violent diarrhœa, attended nearly with the same symptoms as at the prior attack. It was very severe for two days, and then almost entirely ceased; but the pain in the lower part of the abdomen, and about the anus, continued

without much intermission. In the day time it extended round his loins, and was often so violent on rising from a chair, as to prevent his walking erect. In the night he was very restless, and for the most part deprived of sleep. Conceiving that he was not in a fit state to undergo an operation, I advised him to take some doses of castor oil; and afterwards, gentle opiates. By these means his complaints were lessened; but they were by no means so much abated at the end of a week, as I expected. From a suspicion that there might be something about the rectum distinct from the fistula, from which his complaints arose, I begged him to let me examine the gut with my finger. To my great surprise, I soon felt a stone within the rectum, which I afterwards extracted by a pair of forceps. From this time, all his complaints entirely ceased, and with the exception of the fistula, he soon recovered a perfect state of health. On examining the stone, I found it eroded on each side to a considerable depth; an edge nearly as sharp as that of a knife being left. By this circumstance, no doubt, all his complaints had been greatly aggravated. At the end of ten days from the ex-

traction of the stone, I cut him for the fistula. On introducing my finger into the rectum for this purpose, I found the sphincter narrower than usual, which probably arose from the long continuance of the fistula. I could plainly feel within the gut a kind of nidus, formed by a large fold of its internal coat; in this the stone had been lodged. The fistulous cavity communicated with the rectum higher up than it commonly does. From the opening in this part, the cavity of the rectum, and that of the fistula, were, by the operation, laid into one; after which, the patient obtained a perfect cure in about a month.

From the history of this case, it appears very clearly, that the plum stone had continued in the lowest part of the rectum upwards of three years. What prevented its discharge from this situation, at any of the evacuations of the gut, was, probably, the contraction of the sphincter, occasioned by the long continuance of the fistula, previous to his swallowing the stone. These conclusions are grounded on the length of time the diarrhœa continued, on the eroded state of the plum stone, on the ceasing of the diarrhœa from the time of the extraction

of the stone, and on the patient's having more appetite, and a better state of health after the extraction, than he had experienced for the three preceding years. This and other cases that might be mentioned show, that the disease may continue for a great length of time, if left to itself. But I am persuaded, that many would submit to the operation, who now through a dread of it lead a miserable life, had they a true idea of the disease, of the obstacle to its cure by nature, and of the simple operation required. The present method of performing the operation, however, may afford some reason for this general fear of submitting to it. The instrument now chiefly in use is a blunt pointed crooked knife, the point of which must be first introduced through the external opening, and then be carried to meet the finger of the operator: hence in its passage, its cutting edge must be more or less in contact with the sides of the fistula. Much unnecessary pain is hereby often given, before the incision commences, which might be prevented in many cases by the use of a better instrument. But passing over all inferior reasons against the knife hitherto used, I shall con-

tent myself with stating the principal objections to it. We cannot expect to make a perfect cure of this complaint in all cases, unless the rectum be slit open, either from the part where there is already an opening, or in it's thinnest and most diseased part, where there is no such opening. In many of these cases, the external orifice in the skin does not communicate in a direct line with either of the places in the gut I have just mentioned. On the contrary, it is frequently found that the line of communication is so much curved, that neither a probe, nor any other instrument, can be directed in a moment from the external orifice to the diseased part of the gut: in some few cases, the winding of the canal cannot be traced in less time than a minute or two. And as the gut is generally laid bare in this disease to some extent, the knife from this difficulty may not, and often cannot at it's first entrance, be directed to the part previously fixed upon to be cut by the introduction of a probe. Now from the difficulty in some cases of instantaneously finding the opening in the gut, or it's thinnest and most diseased part, where there

is no such opening, I think it probable, that the knife is not always passed through these parts, but is forced through the intestine in another part: for, as the instrument is cutting the sides of the fistula from the first moment of its introduction to that when the operation is finished, the operator has not time enough to explore the parts, so as exactly to hit the place, through which he had intended to introduce the knife*. Another objection to this instrument is, that its point is sometimes too large to enter the orifice of the fistula, unless very great force be used; for however wide the internal cavity of the sinus may be, I have found that in many cases, even the point of a common probe would not enter the orifice, without considerable

* I do not by any means intend to assert, that, if the knife be not always passed through the rectum at the place indicated by the previous examination of the probe, a complete cure may not frequently follow the operation. I mean only to observe, that, if in every operation for the fistula, strict attention be paid to this nice distinction, perfect cures would be more frequently obtained; and I have seen cases, where apparently from a want of a due attention to this circumstance a sinus has remained, which made a repetition of the operation necessary.

exertion. In this case likewise the common crooked bistoury gives unnecessary pain, and begins to cut in it's passage, before there is the smallest necessity for commencing this part of the operation. It also sometimes happens in this disease, that the sinus or fistula opens so near to the verge of the anus, either from the abscess at that part bursting, or from the disease not having been completely cured by a previous operation, that the common open knife cannot be passed into it, without the utmost difficulty, if at all, from the smallness of the orifice, and the difficulty of getting at the part.

These are the chief objections to the common crooked bistoury, and I am persuaded it is owing to these imperfections in it, that the operation sometimes fails of making a perfect cure, or lays a foundation for fresh sinuses, and occasions the necessity of a repetition of the cutting for the disease. The instrument recommended in this paper, to supply the defects of the other, was described about four years ago, in the Medical and Physical Journal. As however it has undergone some further improvement, I now offer a new drawing of it, (Fig^s. 6—6.)

with additional observations on the advantages it possesses over the instrument hitherto used for the purpose. It is in fact nothing more than a crooked bistoury, without a joint at the handle, having a sheath attached to it by a screw, fixed at the place where in the old instrument the joint was situate; but in order to give it more strength, I have directed it to be made shorter, and thicker at the base, than that before described. The length of the blade should therefore be exactly two inches and three quarters*. A stout handle

* This instrument was first neatly made by Mr. Evans; the sheath may be made either of steel or silver, without the notch at it's extremity: and if the curvature be according to the plan of the annexed drawing, the knife will not be injured in withdrawing the sheath from it. Particular care should be taken, that the instrument be made perfectly smooth and probe pointed, when the sheath is fixed upon it, by nicely fitting the point of the sheath to the probe point of the knife. If this be not attended to, it cannot be introduced without giving pain. I have seen several instruments, which were not made with due attention to this circumstance. For those who use this instrument frequently, it would be desirable to have two of them, one a size larger than the other. The former should be used in all cases, where the orifice of the fistula is large enough to admit of it's introduction, as it will allow of being ground more frequently than the

has also been added, which renders the instrument more useful in many cases than the short one used before. This handle not being curved, and the flat part of it being made in the contrary direction to that of the common crooked bistoury, the operator has a firmer grasp of it, than of the latter instrument. With the addition of this handle, the ring formerly described is not so necessary as before; I have however sometimes thought, that, by inserting the point of the forefinger into it, additional steadiness was given to the instrument during the operation. The instrument thus made is to be carefully passed through the external orifice of the fistula, till it has nearly reached the intestine. If the sinus be straight, this will be accomplished very readily, and with scarcely any pain. If it have a winding course, a little time is required for exploring the sinus; but this also may generally be done without giving much

fine one; and the latter in such cases, where the former from its size cannot be passed without using force, and thereby giving unnecessary pain.—These instruments should be kept in a case unsheathed, and in sheathing them great care should be taken, that the edge be not injured.

pain. A forefinger must then be introduced into the rectum, in order to meet the instrument. If there be already a hole through the coats of the gut, the point of the instrument must be carefully passed through the aperture; but should there be no such opening, the intestine may be pierced (as Mr. Pott observes) with very little difficulty. When the point of the knife, in either of these cases, is in contact with the operator's finger, an assistant, by a turn or two of the screw, sets the sheath at liberty, and withdraws it immediately. The surgeon then finishes the operation. After a fistula has been properly laid open, a small quantity of lint should be carefully passed into the bottom of the wound, in order to keep the lips of it asunder. Daily attention to this circumstance is indispensably necessary for the first week or ten days. Without this precaution, a partial union of them by the first intention may take place, as I have several times observed to be the case; and a fresh division of the parts has thereby become necessary. The wound should be afterwards lightly dressed in the same manner, until it is perfectly cicatrized.

Before I conclude, I would just observe, that, having used the instrument above described in a considerable number of cases, I am firmly persuaded of it's eligibility; and that the operation may in almost every instance of the disease in question be performed by it with much less pain, and with more certain effect, than can be expected by the instrument hitherto used for the purpose.

THE END.